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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of )  
 )  
Allocation of Spectrum Below ) ET Docket No. 94-32  
5 GHz Transferred from )  
Federal Government Use )

To: The Commission

COMMENTS  
OF THE  
INDUSTRIAL TELECOMMUNICATIONS ASSOCIATION, INC.

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### **SUMMARY**

The Industrial Telecommunications Association does not believe the approach proposed in the Notice, i.e., allocating spectrum for fixed and mobile subscriber-based communications services, serves the public interest. Moreover, in view of the specific conditions imposed by Congress when it delegated auctions authority to the FCC, ITA finds that the proposal is contrary to the statutory intent. ITA urges the Commission to abandon the subscriber-based approach set forth in the Notice. ITA also urges the Commission to allocate the spectrum under consideration in this proceeding for private internal-use emerging technology systems.

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The Industrial Telecommunications Association, Inc. ("ITA"), pursuant to the Federal Communications Commission's *Notice of Proposed Rule Making* in the above-referenced matter, hereby respectfully submits these Comments responsive to the Commission's proposal.<sup>1</sup>

I. PRELIMINARY STATEMENT

1. ITA, formerly the Special Industrial Radio Service Association, Inc. (SIRSA), is an association organized under the laws of the District of Columbia. ITA is the Commission's certified frequency coordinator for the Special Industrial Radio Service and the Industrial/Land Transportation 421-430 MHz and 800/900 MHz frequency pools. ITA also coordinates channels from

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<sup>1</sup> *Notice of Proposed Rule Making* (FCC 94-272), ET Docket No. 94-32, October 20, 1994, released November 8, 1994, (hereinafter "*Notice*").

the 800 MHz General Category pool for those entities: (a) eligible to become Industrial/Land Transportation licensees; (b) wishing to expand trunked systems; or (c) consolidating conventional systems into a trunked system. ITA coordinates in excess of 6,000 applications per year on behalf of applicants seeking Commission authority to operate radio stations on frequency assignments allocated to the Special Industrial Radio Service and the enumerated 800/900 MHz frequency pools.

2. ITA enjoys the support of a membership that includes more than 8,600 private land mobile radio communications licensees and the following trade associations:

Alliance of Motion Picture and Television Producers  
American Mining Congress  
Associated Builders & Contractors, Inc.  
Florida Citrus Processors Association  
Florida Fruit & Vegetable Association  
National Aggregates Association  
National Food Processors Association  
National Propane Gas Association  
National Ready-Mixed Concrete Association  
National Utility Contractors Association  
New England Fuel Institute  
United States Telephone Association.

## II. COMMENTS

3. The Industrial Telecommunications Association believes the proposed allocation of Federal Government spectrum in the bands 2390-2400 MHz, 2402-2417 MHz and 4660-4685 MHz is in violation of fundamental precepts of the Communications Act of 1934, as amended, and is contrary to the public interest. Additionally, though the Commission states that the proposed allocation will enhance

existing services, foster economic growth and improve access to communications by industry, the Notice contains no support for these statements.

**A. The FCC's Proposal Distorts the Validity of Marketplace Choices.**

4. The proposal relies on an overly simplistic and unrealistic view of the marketplace as a device for allocating resources. In its essential function, the marketplace works as a voting mechanism. Consumers vote by spending their income on available goods. In a normal environment, the purchasing habits of consumers will represent a rational choice between the goods available at the marketplace. Consumers will tend to spend their income on goods that are most desirable and will forego the purchase of goods that are less desirable.

5. The push to allow market forces to operate without artificial impediments has been one of the forces motivating the Commission's deregulatory efforts over the past decade. The only way the FCC can create a free market, however, is to allocate spectrum for a broad range of telecommunications services, thereby expanding the options available to users of the spectrum. The Commission followed this approach, for example, in 1986 when it allocated the 900 Mhz spectrum for a variety of different radio services, both commercial and private. For the marketplace to represent an economically efficient device for the allocation of

the spectrum resource, consumers must have the opportunity to make a rational choice between all potentially competing products or goods. To the extent that one or more goods are not available on the marketplace, the consumers' choices will obviously be skewed in favor of the goods that are available.

6. The Commission's proposal in the instant proceeding posits a marketplace in which there will be two products available for consumption: (1) subscriber-based mobile services and (2) subscriber-based fixed services. If these two products were the only goods required for society to survive and flourish, then the Commission's proposal would represent an effective and efficient use of marketplace theory. In fact, however, the assumptions set forth in the *Notice* represent an arbitrary and ill-conceived attempt to skew consumers' choices and distort the validity of the voting mechanism.

**B. Non-Subscriber Telecommunications Services  
Are Essential to the Social Welfare.**

7. In addition to subscriber-based mobile services and subscriber-based fixed services, there are other telecommunications products that are essential to the effective functioning of society. Society requires a variety of other products of the radio spectrum that are not oriented to serving subscribers. These non-subscriber services are primarily of three types: (1) radio systems that will enhance the efficiency of public safety and

public service organizations; (2) radio systems that provide for the protection and security of inherently dangerous industrial activities; and (3) radio systems that improve the productivity and efficiency of industrial activities.

C. The FCC's Proposal For a Market-Based "Flexible Allocation" Plan Is Defective From Both a Legal and Practical Perspective.

8. The Commission's proposal contemplates using the bands 2390-2400 MHz, 2402-2417 MHz and 4660-4685 MHz only for telecommunications services that can be assigned using the auctions mechanism.<sup>2</sup> The Notice anticipates "a flexible allocation that relies substantially on market forces."<sup>3</sup> As Congress recognized in the Omnibus Budget Reconciliation Act of 1993, however, auctions do not represent a valid assignment mechanism for all uses of the radio spectrum. Indeed, Congress specifically restricted the Commission to using auctions only in cases where the principal use of the radio spectrum under consideration involves licensees receiving compensation from subscribers.<sup>4</sup> Further, Congress specified that the Commission "may not base a finding of public interest, convenience, and necessity on the expectation of Federal

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<sup>2</sup> Notice, paragraph 9.

<sup>3</sup> *Id.*

<sup>4</sup> Section 309(j) of the Communications Act of 1934, as amended by Section 6002(a) of the Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66, 107 Stat. 312, 388 (1993).



revenues from the use of a system of competitive bidding."<sup>5</sup>

9. The Commission's proposal for a "flexible allocation" relying on "market forces" is fatally flawed from both a legal and practical viewpoint. As a legal matter, the Notice has predetermined that auctions represent the best method for assigning the spectrum under consideration. This conclusion necessarily rules out any use of the bands 2390-2400 MHz, 2402-2417 MHz and 4660-4685 MHz for radio services that are not predominantly subscriber-based. Without a proper assessment of the relative value of the different radio services that might be established on the bands under consideration, the Commission has determined that subscriber-based services represent the highest value use. This conclusion represents an abdication of the FCC's responsibility under the Communications Act to allocate the use of the radio spectrum as required by the public convenience, interest, or necessity.

**D. The FCC's Proposal Elevates Auctions From An Assignment Mechanism to An Allocation Mechanism.**

10. Moreover, in direct contravention of the Congressional mandate, the Commission's proposal elevates the role of auctions from merely an assignment mechanism to an allocation mechanism. Along with the right to use the specific portions of the radio

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<sup>5</sup> *Id.*, § 6002(a), 107 Stat. at 390.

spectrum, successful bidders will also be able to determine, at random, whether the spectrum is to be used for fixed or mobile communications. Thus, the amount of money bid for specific parcels of spectrum will be the sole determinant of the nature of the radio services ultimately established. This is not what Congress contemplated when it delegated authority for auctions to the Commission. The flexible allocation proposed in the system will, in fact, use auction revenues as the basis for decisions that are the exclusive preserve of the Commission's public interest decision-making processes. In one sense, using auctions in this manner eliminates the need for the Commission to make the difficult decisions that are a necessary element of major allocation proceedings. In view of the painstaking analysis often required in major allocation proceedings, the Commission may prefer the "ease" of auctions as an allocation device. However, ITA believes that Congress did not intend such a result when adopting the auctions authority.

**E. The FCC's Marketplace Assumptions Will Result In a Misallocation of the Radio Spectrum.**

11. Underlying the Commission's proposal is the expectation that, assuming the telecommunications marketplace functions effectively, there will be adequate spectrum available to industrial, public safety and public service organizations to support their communications requirements. The Notice anticipates that the market mechanism will facilitate this result. The

proposal assumes that industrial organizations and public service and public safety agencies in need of additional radio spectrum will simply compete for the spectrum with consumer-oriented applications through the mechanism of spectrum auctions.<sup>6</sup>

12. Under the Commission's "flexible allocation" plan, if petroleum companies really need to use the radio spectrum to provide emergency communication systems in an oil refinery, these companies will simply have to bid more for the radio spectrum than the providers of consumer-oriented radio services. Requiring petroleum companies to bid for spectrum will, of course, drive up the price of oil products. The proposal assumes that if consumers perceive the safety and security afforded by spectrum-based communications systems to be a social good, they will be willing to pay for this good through higher prices. Alternatively, if industrial organizations are not willing to compete for spectrum through the auctions process, they can simply purchase the necessary communications from communications providers that have successfully bid for the right to use the spectrum. This option will also increase the cost of the products sold by the nation's industries. Once again, however, the proposal assumes that rational consumers will pay a higher price for goods and services if they really value safety and security in petroleum operations.

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<sup>6</sup> "[P]rivate users can receive service from commercial providers and can compete in obtaining spectrum on the same basis as commercial providers." Notice, paragraph 16.

13. The Commission's assumptions as to the manner in which the market will function are relevant only in theory. Applied in a practical world, the Commission's theories will result in misallocation of the radio spectrum, impose unnecessary costs on industrial, public safety and public service organizations and subject the public to unnecessary risk and potential disasters. The market theories underlying the flexible allocation plan will work only in an ideal environment, where consumers have perfect knowledge of the opportunity costs of alternative uses of the radio spectrum and where commercial service providers are perfectly poised to meet the telecommunications requirements of industrial, public safety and public service organizations.

14. In fact, consumers do not have perfect knowledge of the opportunity costs of alternative uses of the spectrum, and commercial service providers are not perfectly poised to meet the telecommunications requirements of industrial, public safety and public service organizations. Additionally, there are "real world" constraints on the ability of industrial, public safety and public service organizations to bid for the spectrum. Unlike consumer-oriented communications services, the communications systems used by industry and public safety entities are not revenue-producing. As a consequence, the costs associated with establishing radio systems to support industrial, public service and public safety systems must necessarily be passed on to consumers, either through increases in the cost of the products produced or, in the case of

public safety agencies, through higher taxes.

15. Unfortunately, consumers are not as rational as the Commission's marketplace model assumes. In practice, consumers may desire to forego the use of radio systems for safety and security, i.e., they may not want to pay the extra cost of such systems. This will tend to be particularly true in cases when the consumers are not aware of the full implications of safety-related communications systems. Should consumers express a distaste for the higher costs associated with industrial, public service and public safety communications systems, the entrepreneurial system will inevitably respond. The providers of industrial products and public services may choose to offer lower prices by compromising the safety of the community -- in the same way that some airlines appear to compete by devoting fewer resources to training and maintenance of their fleets. Thus, the Commission's efforts to superimpose a marketplace model on the telecommunications environment may have potentially disastrous consequences.

**F. Providers of Commercial Telecommunications Services Are Often Not Able to Meet the Needs of Industrial, Public Service and Public Safety Organizations.**

16. It is a fallacy to assume, as the Commission does, that the licensees of commercial telecommunications systems will have either the incentive or the ability to satisfy the telecommunications requirements of industrial, public service and

public safety organizations. Industrial entities often demand overall system reliability in excess of the capabilities of common carrier systems. By definition, common carriers tend to design their systems to meet the requirements of a typical customer and not the more specialized needs of the entities served through private radio communications systems.<sup>7</sup> In addition, industrial, public service and public safety entities often require communications systems in remote areas, far removed from the service areas of subscriber-based commercial systems.<sup>8</sup>

**G. The FCC Must Act on the Allocation of Spectrum for Internal-Use Systems Requested In the COPE Petition for Rule Making.**

17. It is imperative that the Commission act favorably on the Petition for Rule Making filed by the Coalition of Private Users of Emerging Multimedia Technologies (COPE). In this Petition, filed December 23, 1993, COPE requested an allocation of 75 megahertz of spectrum to support privately operated internal-use emerging technology systems. The spectrum requested would be used to accommodate the needs of the private land mobile radio user communities for advanced wireless imaging and decision processing/remote file access systems.

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<sup>7</sup> *Milestones in the Development of the Private Operational-Fixed Microwave Radio Service*, in *POLICIES AND PRACTICES IN THE REGULATION OF PRIVATE RADIO COMMUNICATIONS SYSTEMS* page 12-13 (ITA Publications, 1994).

<sup>8</sup> *Id.* at 7-2.

18. As discussed in COPE's Petition for Rule Making, the availability and dependability of private land mobile communications is one of the primary factors that has allowed the United States to establish and maintain its position as the world's leading producer of goods and services. Private land mobile radio systems have become an indispensable part of all segments of the industrial, business, public safety, public service and land transportation mobile work force. As discussed above, commercial service providers, including the PCS industry, will not be able to provide the degree of reliability and security that many users of private radio systems demand. Accordingly, the allocation of the frequency bands under consideration in this proceeding for private internal-use systems will help to ensure that emerging technologies are available to enhance essential industrial and public services.

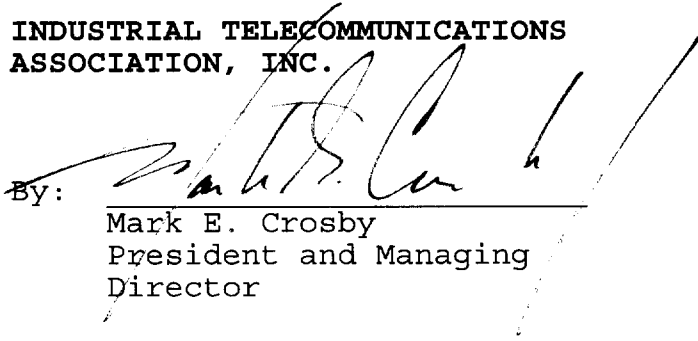
### III. CONCLUSION

19. The Industrial Telecommunications Association does not believe the approach proposed in the *Notice*, i.e., allocating spectrum for fixed and mobile subscriber-based communications services, serves the public interest. Moreover, in view of the specific conditions imposed by Congress when it delegated auctions authority to the FCC, ITA finds that the proposal is contrary to the statutory intent. ITA urges the Commission to abandon the subscriber-based approach set forth in the *Notice*. ITA also urges the Commission to allocate the spectrum under consideration in this proceeding for private internal-use emerging technology systems.

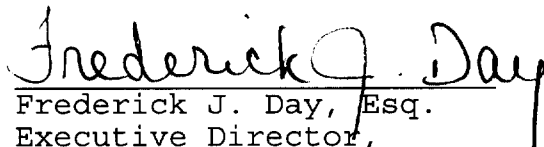
WHEREFORE, THE PREMISES CONSIDERED, the Industrial Telecommunications Association, Inc. respectfully submits these Comments and urges the Federal Communications Commission to act in accordance with the views expressed herein.

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